

## REAGENTS PROVIDED

**NorthernLights™ 557 (NL557)-conjugated mouse monoclonal anti-Digoxigenin:** Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.09% sodium azide.

**Clone #:** 611621

**Isotype:** mouse IgG<sub>2A</sub>

## STORAGE

Reagents are stable for **twelve months** from date of receipt when stored in the dark at 2-8 °C.

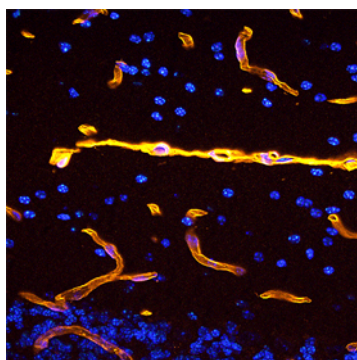
## INTENDED USE

Designed to visualize the expression of Digoxigenin labeled proteins and nucleic acids and Digoxigenin conjugated primary antibodies by fluorescence microscopy in cells and tissues.

## PRODUCT DESCRIPTION

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with Digoxigenin-KLH. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to fluorochrome NL557. The spectral characteristics of NL557 are provided, along with those of Rhodamine Red™-X (RRX) and Cy™3 for comparison.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL557	557	574
RRX	570	590
Cy3	548	562



Digoxigenin-NL557

Fluorescent detection of mouse Netrin-4 in vasculature in cryostat sections of mouse brain (nucleus accumbens) using Goat Anti-Mouse Netrin-4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1132) conjugated to Digoxigenin and NL557-conjugated mouse anti-Digoxigenin (Catalog # NL7250R; yellow). Cell nuclei were counterstained with DAPI (blue).

## BACKGROUND INFORMATION

Digoxigenin is a hapten, a small molecule with high immunogenicity, that is used in many molecular biology applications similarly to other popular haptens such as DNP (dinitrophenol), biotin, and fluorescein. Digoxigenin is a steroid found exclusively in the flowers and leaves of the plant genus *Digitalis*. Digoxigenin can be introduced into proteins and nucleic acids for detection in a variety of assays, including ELISA, Immunohistochemistry, *in situ* hybridization, Southern blot, and Western blot. Our high affinity anti-Digoxigenin antibodies are available unconjugated or with fluorescent NorthernLights™ dyes, Alexa Fluor® 488, biotin, HRP, or alkaline phosphatase conjugations.

## REFERENCES

1. Décarie, A.A. *et al.* (1994) *Peptides* **15**(3):511.
2. Hauptmann, G. *et al.* (1994) *Trends in Genetics* **10**(8):266.
3. Goodarzi, M.T. *et al.* (1995) *Biochemical Society Transactions* **23**(2):168S.

## FLUORESCENT STAINING VALIDATION

This antibody has been tested for immunofluorescence using normal mouse and rat brains fixed by transcardial perfusion with 4% formaldehyde/14% picric acid. Tissue sections were incubated with Digoxigenin-conjugated antibodies overnight at 4 °C. After washing with PBS, tissues were incubated with NL557-conjugated antibody at a final concentration of 1X (1:10 dilution) in diluent buffer for 1 hour at room temperature.

**Warning:** Contains sodium azide as a preservative. Sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

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*Rhodamine Red* is a trademark of Invitrogen, Inc.

*Cy* is a trademark of GE Healthcare.

*Alexa Fluor* is a registered trademark of Life Technologies Corp.